

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ALTERNATIVE RATE ADJUSTMENT FILING OF ) CASE NO.  
KNOX COUNTY UTILITY COMMISSION ) 2015-00142

NOTICE OF FILING OF COMMISSION STAFF REPORT

Notice is hereby given that, in accordance with the Commission's Order of May 20, 2015, the attached report containing the findings of Commission Staff regarding the Applicant's proposed rate adjustment has been filed in the record of the above-styled proceeding. Pursuant to paragraphs 2 and 4 of the Commission's May 20, 2015 Order, Knox County Utility Commission is required to file written comments regarding the findings of Commission Staff no later than August 11, 2015.



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Jeff Derouen  
Executive Director  
Public Service Commission  
P.O. Box 615  
Frankfort, KY 40602

DATED       **JUL 28 2015**      

cc: Parties of Record

STAFF REPORT  
ON  
KNOX COUNTY UTILITY COMMISSION  
CASE NO. 2015-00142

Knox County Utility Commission (“Knox County”) operates a Water Division that provides water service to approximately 2,808 customers residing in Bell, Knox, and Whitley Counties, Kentucky,<sup>1</sup> and a Sewer Division that provides wastewater service to approximately 15 customers<sup>2</sup> that reside in Knox County.

On April 30, 2015, Knox County tendered an application to the Commission pursuant to 807 KAR 5:076 requesting to increase its water service rates. In support of its requested rates, Knox County provided financial exhibits with its Application that were based on the test year ended December 31, 2014. These exhibits are shown below in condensed form and demonstrate that a revenue increase of \$419,712, or 37.67 percent, is warranted. Knox County requested rates that increase its annual revenues by \$260,416, or 24.41 percent.<sup>3</sup> The requested water service rates would increase the cost of 5,000 gallons of water purchased through a 5/8-inch x 3/4-inch meter from \$39.83 to \$49.83 per month, an increase of \$10, or 25.11 percent.

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<sup>1</sup> *Annual Report of Knox County Utility Commission (Water Division) to the Public Service Commission for the Calendar Year Ended December 31, 2014 (“2014 Water Annual Report”)* at 12 and 53.

<sup>2</sup> *Annual Report of Knox County Utility Commission (Wastewater Division) to the Public Service Commission for the Calendar Year Ended December 31, 2014*, at 25.

<sup>3</sup> Knox County provided an amended billing analysis subsequent to the filing of its application on July 15, 2015. Per the amended billing analysis, Knox County restates that its proposed rates will increase revenues by \$260,416.

Overall Revenue Requirement and Required Revenue Increase

Pro Forma Operating Expenses	\$ 1,412,702
Plus: Average Annual Principal and Interest Payments on Current Debts	<u>177,548</u>
Overall Revenue Requirement	1,590,250
Less: Other Operating Revenue	(51,726)
Interest Income	<u>(4,598)</u>
Revenue Required From Rates	1,533,926
Less: Pro Forma Present Rate Service Revenues	<u>(1,114,214)</u>
Required Revenue Increase	<u>\$ 419,712</u>
Percent Increase	<u>37.67%</u>

Staff performed a limited financial review of Knox County's operations for the test year ended December 31, 2014, to determine the reasonableness of Knox County's requested water rates. The scope of Staff's review was limited to determining whether operations reported for the test year were representative of normal operations. Known and measurable changes to test-year operations were identified and adjustments were made when their effects were deemed to be material. Insignificant or immaterial discrepancies were not pursued and were not addressed.

Staff's findings are summarized in this report. Ariel Turnbull reviewed the calculation of Knox County's Overall Revenue Requirement. Jason Green reviewed reported revenues and rate design.

Summary of Findings

1. Overall Revenue Requirement and Required Revenue Increase. Staff found that Knox County can justify a total Overall Revenue Requirement for its Water Division of \$1,398,644 and that a water revenue increase of \$233,341, or 21.04 percent,

above pro forma present rate water revenues is necessary to generate the Overall Revenue Requirement.

2. Water Rates. To calculate the rates to produce the Staff-calculated revenue requirements, Staff increased current rates by the percentage increase in the Staff-calculated revenue requirement evenly across the board. This method allocates the revenue requirement increase to all customers in an equal manner.

3. Depreciation. As set out in Attachment B of this report, Staff finds that the depreciable lives assigned to certain assets should be changed for ratemaking purposes and that these lives should be used for accounting purposes in all future reporting periods. These recommended depreciable lives better match the life expectancy of Knox County's assets and will better match expenses to revenues. No adjustment to accumulated depreciation and retained earnings should be made to account for the retroactive effect of this recommended change in accounting estimate.

## Pro Forma Operating Statements

Knox County's Pro Forma Operating Statement for its Water Division based on test-year operations ended December 31, 2014, as determined by Staff is shown below:

	Test Year	Adjustment (Ref.)	Pro Forma
Operating Revenues			
Sales of Water	\$ 1,099,122	\$ 9,857 (A)	\$ 1,108,979
Miscellaneous Service Revenue	51,726		51,726
<b>Total Operating Revenues</b>	<b>1,150,848</b>	<b>9,857</b>	<b>1,160,705</b>
Operating Expenses			
Operation and Maintenance Expenses			
Salaries and Wages - Employees	273,620	(7,701) (B)	265,919
Salaries and Wages - Commissioners	12,000	(64) (C)	11,936
Employee Pensions and Benefits	170,251	(1,345) (D)	168,906
Purchased Water	219,624	(8,477) (E)	211,147
Purchased Power for Pumping	52,263	(2,017) (E)	50,246
Purchased Power, Office	11,206	(60) (C)	11,146
Chemicals	53,667	(2,072) (E)	51,595
Contractual Services	23,167	(71) (C)	23,096
Transportation Expenses	24,751		24,751
Insurance	30,823	(62) (D)	
		(234) (F)	30,527
Bad Debt Expense	13,777		13,777
Miscellaneous Expense	74,661	(169) (C)	74,492
<b>Total Operation and Maintenance Expenses</b>	<b>959,810</b>	<b>(22,271)</b>	<b>937,539</b>
Taxes Other Than Income	24,404	(2,762) (G)	21,642
Depreciation	428,488	(202,082) (H)	226,406
<b>Total Operating Expenses</b>	<b>1,412,702</b>	<b>(227,116)</b>	<b>1,185,586</b>
<b>Net Operating Income</b>	<b>(261,854)</b>	<b>236,973</b>	<b>(24,881)</b>
Interest Income	4,598		4,598
<b>Income Available to Service Debt</b>	<b>\$ (257,256)</b>	<b>\$ 236,973</b>	<b>\$ (20,283)</b>

(A) Billing Analysis Adjustment. In its Application, Knox County provided a billing analysis that showed \$1,114,214 in revenue from water sales. This billing analysis was determined to be inaccurate, as the customer usage information was outside of the test period. Knox County updated the billing analysis using customer usage information for the year ending December 31, 2014. Providing the corrected

usage information for the year ending December 31, 2014. Providing the corrected billing analysis and making billing adjustments for water leaks and misread meters, Staff was able to calculate a normalized test-period revenue of \$1,108,979, requiring an adjustment of \$9,857.

(B) Salaries and Wages – Employees. During the test year, Knox County reported total employee wages expense in the amount of \$274,288. This amount was split between the Water and Sewer Divisions’ reported Salaries and Wages – Employees in the amounts of \$273,620 and \$668, respectively. As discussed in detail below, Staff calculated Knox County’s total pro forma employee wage expense to be \$268,044 and it determined that \$265,919<sup>4</sup> of this amount should be recognized as an expense of the Water Division. Accordingly, Staff decreased the Water Division’s test-year employee wage expense by \$7,701.<sup>5</sup>

Calculation of Total Pro Forma Wage Expense. Staff’s calculation of Knox County’s total pro forma wages is shown in the table below. Staff’s calculation accounts for: 1) an increase to test-year wages that resulted from a \$.30 per hour pay raise

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Office Employees	\$	49,757
Field Employees		166,019
Superintendent		50,143
 Total Pro Forma Allocation	 \$	 265,919

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Pro Forma Water Division Wages	\$	265,919
Less: Test Year		(273,620)
 Decrease	 \$	 (7,701)

awarded to each employee that became effective on January 7, 2015; 2) an increase in test-year wages that resulted from the hiring of a new office employee on April 16, 2015; and 3) a decrease to test-year wages that resulted from the retirement of the superintendent on July 31, 2015.<sup>6</sup>

	<u>Current Pay Rate</u>	<u>Regular Hours</u>	<u>Overtime at Regular Time</u>	<u>Overtime Hours (x1.5)</u>	<u>Pro Forma</u>
Office Employees					
Employee 1	\$ 15.96	2,080		2.5	\$ 33,257
Employee 2	8.00	2,080		10.5	16,766
Field Employees					
Employee 3	15.80	2,080		98.5	35,198
Employee 4	14.61	1,154		7.5	17,024
Employee 5	16.30	2,080	20.0	75.5	36,076
Employee 6	12.30	2,080	8.0	72.5	27,020
Employee 7	14.30	2,063		57.0	30,724
Employee 8	9.55	2,078		111	21,435
Superintendent, Salaried					<u>50,544</u>
Pro Forma Wages					<u>\$268,044</u>

Allocation of Pro Forma Office Employee Wages to the Water Division. As shown in the table above, pro forma wages include two full-time office employees who perform administrative duties for the Water Division and Sewer Division. The amount of time these employees dedicate to each division is directly related to the number of

<sup>6</sup> To calculate pro forma wages, Staff applied each employee's current pay rate to the regular and overtime hours worked by each employee during the test year. The new office employee was assigned the test-year hours worked by the assistant superintendent, who primarily performed office duties.

customers served by the division. Accordingly, Staff allocated office wages based on the number of customers served by each division,<sup>7</sup> as shown below:

	Pro Forma	Allocated To	
		Water Division	Sewer Division
		99.47%	0.53%
Office Employees			
Employee No. 1	\$ 33,257	\$ 33,080	\$ 177
Employee No. 2	16,766	16,677	89
Total	\$ 50,023	\$ 49,757	\$ 266

Allocation of Pro Forma Field Employee Wages to the Water Division. As shown above in Staff's calculation of Knox County's pro forma wages, Knox County has six full-time field employees. Employee No. 6 serves as Knox County's certified sewer collection operator. Knox County estimated that this employee dedicates 95 percent of his time to water operations and 5 percent to sewer operations. Staff split this employee's pro forma wages accordingly, as shown below:

	Pro Forma	Allocated To	
		Water Division	Sewer Division
		95%	5%
Employee No. 6	\$ 27,020	\$ 25,669	\$ 1,351

<sup>7</sup>

Number of Customer Allocation Factor

Number of Sewer Customers	15	0.53%
Number of Water Customers	2,808	99.47%
Total Customers	2,823	100.00%

Also, Employee Nos. 3, 7, and 8, as listed above in Staff's pro forma wage calculation, spend approximately five days per month, or 23.08 percent of their time,<sup>8</sup> reading water meters. Because sewer revenues are also calculated using water meter readings, a portion of pro forma meter reading wages should be allocated to both divisions. Staff finds that the number of customers allocation factor is appropriate for this allocation. As shown in the calculation below, Staff determined that \$20,162 of Knox County's pro forma wage expense is attributed to meter reading and that \$20,055 should be allocated to the Water Division and \$107 to the Sewer Division.

	<u>Pro Forma</u>	Meter Reading <u>23.08%</u>	<u>Allocated To</u>	
			Water Division <u>99.47%</u>	Sewer Division <u>0.53%</u>
Employee No. 3	\$ 35,198	\$ 8,124	\$ 8,081	\$ 43
Employee No. 7	30,724	7,091	7,053	38
Employee No. 8	21,435	4,947	4,921	26
<b>Total</b>	<b>\$ 87,357</b>	<b>\$ 20,162</b>	<b>\$ 20,055</b>	<b>\$ 107</b>

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<sup>8</sup>

Number of Days to Read Meters	5
Times: 12 Months	<u>12</u>
Total Days	60
Divide by: Annual Workdays	<u>260</u>
Percentage of Time Meter Reading	<u><u>23.08%</u></u>

Staff's allocation of pro forma field employee wages to each division is summarized below:

	Pro Forma	Allocated To	
		Water Division	Sewer Division
Field Employees			
Employee No. 3	\$ 35,198	\$ 35,155	\$ 43
Employee No. 4	17,024	17,024	
Employee No. 5	36,076	36,076	
Employee No. 6	27,020	25,669	1,351
Employee No. 7	30,724	30,686	38
Employee No. 8	21,435	21,409	26
	<u>\$167,477</u>	<u>\$ 166,019</u>	<u>\$ 1,458</u>

Allocation of Superintendent. The superintendent directs and oversees the duties of all employees. Accordingly, Staff allocated the superintendent's pro forma salary to the Water Division and to the Sewer Division based on the allocated pro forma wages of Knox County's other employees.

	Pro Forma Office and Field Employee Wages	Percent Allocated	Pro Forma Superintendent Allocation
Water Division	\$ 215,776	99.21%	\$ 50,143
Sewer Division	1,724	0.79%	401
Total	<u>\$ 217,500</u>	<u>100.00%</u>	<u>\$ 50,544</u>

(C) Administrative Operating Expenses. Knox County incurred test-year administrative and general expenses that totaled \$68,399. While these expenses are primarily related to customer service and administrative activities for both the Water

Division and Sewer Division, the entire test-year amount was reported as an expense of the Water Division. The portion of these expenses that are attributed to the Sewer Division should be removed when determining the Water Division's pro forma operations. Since there is a direct correlation between these expenses and the number of customers served by each division, Staff finds that the number of customers allocation factor, as calculated in footnote 6, is appropriate for allocating these costs. As shown in the table below, Staff reduced test-year water expenses by \$363.

	<u>Test Year</u>	<u>Allocated To</u>	
		<u>Water Division 99.47%</u>	<u>Sewer Division 0.53%</u>
Salaries and Wages – Officers	\$ 12,000	\$ 11,936	\$ 64
Purchased Power, Office	11,206	11,146	60
Contractual Services – Accounting / Audit	13,350	13,279	71
Reported as Miscellaneous Expense	31,843	31,674	169
	<u>\$ 68,399</u>	<u>\$ 68,036</u>	<u>\$ 363</u>

(D) Payroll Related Expenses. Knox County incurred test-year payroll related expenses that totaled \$178,157. The entire amount was reported as an expense of the Water Division. Staff allocated these test-year expenses between the Water Division and Sewer Division following the allocation of total pro forma wages made by Staff as

previously discussed in Ref. Item (B).<sup>9</sup> As shown below, this allocation requires that the Water Division's test-year expenses be reduced by \$1,407.

	<u>Test Year</u>	<u>Allocated To</u>	
		<u>Water Division</u>	<u>Sewer Division</u>
Employee Pensions and Benefits	\$ 170,251	\$ 168,906	\$ 1,345
Insurance – Worker's Compensation	7,906	7,844	62
<b>Total</b>	<b>\$ 178,157</b>	<b>\$ 176,750</b>	<b>\$ 1,407</b>

(E) Water Loss. Using information provided by Knox County, Staff determined that Knox County's test-year water loss was 18.86 percent,<sup>10</sup> or 3.86 percent above the 15 percent allowed by 807 KAR 5:066, Section 6(3), for ratemaking purposes. As calculated below, Staff removed the cost to purchase, pump, and treat water loss above

9

	<u>Pro Forma Wages</u>	<u>Allocation Percentage</u>
Water Division	\$ 265,919	99.21%
Sewer Division	2,125	0.79%
<b>Total</b>	<b>\$ 268,044</b>	<b>100.00%</b>

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Water Produced	190,434,000
Less: Water Sold	(126,248,300)
Other Water Used	<u>(28,279,000)</u>
<b>Water Loss</b>	<b><u>35,906,700</u></b>
<b>Water Loss Percentage</b>	<b><u>18.86%</u></b>

the allowable limit. Accordingly, Staff decreased test-year Purchased Water, Purchased Power, and Chemicals by \$8,477, \$2,017, and \$2,072, respectively.

	<u>Test Year</u>	<u>Times: Excess Water Loss Percentage</u>	<u>Decrease</u>
Purchased Water	\$ 219,624	-3.86%	\$ (8,477)
Purchased Power	52,263	-3.86%	(2,017)
Chemicals	53,667	-3.86%	(2,072)

(F) General Liability Insurance Expense. During the test year, Knox County reported \$14,376 that was paid to American Alternative Insurance Corporation (“American Alternative”) for general liability insurance. While this insurance policy benefitted both Knox County’s Water Division and Sewer Division, the entire premium was reported as an expense to the Water Division. The portion of the premium that can be attributed to the Sewer Division should be removed from the Water Division’s test-year operations and accounted for as an expense to the Sewer Division.

The insurance documents provided to Knox County by American Alternative that were reviewed by Staff did not separate the insurance premium between the divisions. Absent American Alternative’s separation, Staff allocated the test-year premium based on the test-year revenues reported by each division, recognizing that the Commission has determined in prior cases that general liability insurance premiums can be directly correlated to a utility’s revenues.<sup>11</sup> Using this allocation method, Staff determined that

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<sup>11</sup> Case No. 2008-00032, *Application of Burkesville Gas Company for an Adjustment of Rates Pursuant to the Alternative Rate Filing Procedure for Small Utilities* (Ky. PSC Oct. 31, 2008), Order at 8; and Case No. 2009-00227, *Alternative Rate Filing Application of Middletown Waste Disposal, Inc.* (Ky. PSC Apr. 30, 2010) at 5, n.13.

\$234 should be removed from the Water Division's test-year operations as calculated below:

	<u>Test Year</u>	<u>Water Division</u>	<u>Sewer Division</u>
Pro Forma Present Rate Revenues	\$ 1,179,872	\$ 1,160,705	\$ 19,167
Percent of Total	100.00%	98.38%	1.62%
Allocated General Liability	14,376	14,142	234
Less: Test Year		<u>(14,376)</u>	
Adjustment		<u>\$ (234)</u>	<u>\$ 234</u>

(G) Taxes Other Than Income – FICA Taxes. Below, Staff calculated the Water Division's pro forma payroll taxes by multiplying its pro forma taxable wages by the payroll tax rate. Accordingly, Staff decreased Taxes Other Than Income by \$2,762.

Pro Forma Water Division Wages Subject to FICA Taxes	\$ 265,919
Times: FICA Tax Rate	<u>7.65%</u>
Payroll Tax Expense	20,343
Less: Test-Year FICA Taxes	<u>(23,105)</u>
Decrease	<u>\$ (2,762)</u>

(H) Depreciation. Knox County reported \$428,488 for test-year depreciation expense. Staff reviewed all the lives assigned to Knox County's assets used. A Summary of this review is found at Attachment B of this report. Based on this review, Staff determined that Knox County's test-year depreciation should be decreased by \$202,082, as calculated below:

Asset	Original Cost	Staff Useful Life	Pro Forma
Structures and Improvements	\$ 234,535	37.5	\$ 6,254
Other Equipment	62,550	17.5	3,574
Pumping Equipment	95,517	20	4,776
Meters	144,438	40	3,611
Meter Installations	132,398	45	2,942
Transmission and Distribution Mains	9,533,793	62.5	152,541
New Services	391,096	40	9,777
Hydrants	48,876	50	978
Tanks	1,089,464	45	24,210
Transportation Equipment	106,690	7	<u>15,241</u>
Pro Forma			223,905
Less: Test-Year Depreciation on Assets Listed in the Adjustment			<u>(425,987)</u>
Decrease			<u>\$ (202,082)</u>

### Overall Revenue Requirement and Required Revenue Increase

Knox County and Staff used the Debt Service Coverage (“DSC”) method as generally accepted by the Commission to calculate the Overall Revenue Requirements. This method allows for recovery of: 1) cash related pro forma operating expenses; 2) recovery of depreciation expense, a non-cash item, to provide working capital;<sup>12</sup> 3) the average annual principal and interest payments on all long-term debts, and 4) working capital that is in addition to depreciation expense.

A comparison of Knox County’s and Staff’s calculation of the Water Division’s Overall Revenue Requirement and Required Revenue Increase is shown below:

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<sup>12</sup> The Kentucky Supreme Court has held that the Commission must permit a water district to recover its depreciation expense through its rates for service to provide internal funds to be used for renewing and replacing assets. *See Public Serv. Comm’n of Kentucky v. Dewitt Water Dist.*, 720 S.W.2d 725, 728 (Ky.1986). Although a water district’s lenders require that a small portion of the depreciation funds be deposited annually into a debt reserve/depreciation fund until the account’s balance accumulates to a required threshold, neither the Commission nor the Court requires that revenues collected for depreciation be accounted for separately from the water district’s general funds or that depreciation funds be used only for asset renewal and replacement. The Commission has recognized that the working capital provided through recovery of depreciation expense may be used for purposes other than renewal and replacement of assets. *See also* Case No. 2012-00309, *Application of Southern Water and Sewer District for an Adjustment in Rates Pursuant to the Alternative Rate Filing Procedure for Small Utilities* (Ky. PSC Dec. 21, 2012).

	<u>Knox County</u>	<u>Staff</u>
Pro Forma Operating Expenses	\$1,412,702	\$ 1,185,586
Plus: Average Annual Principal and Interest Payments	177,548	177,548
Additional Working Capital		<u>35,510</u>
Overall Revenue Requirement	1,590,250	1,398,644
Less: Other Operating Revenue	(51,726)	(51,726)
Interest Income	<u>(4,598)</u>	<u>(4,598)</u>
Revenue Required From Rates	1,533,926	1,342,320
Less: Pro Forma Present Rate Service Revenues	<u>(1,114,214)</u>	<u>(1,108,979)</u>
Required Revenue Increase	<u>\$ 419,712</u>	<u>\$ 233,341</u>
Pecent Increase	<u>37.67%</u>	<u>21.04%</u>

(1) Average Principal and Interest Payments on Current Debts. Knox County currently has outstanding bonds payable to the Kentucky Rural Water Finance Corporation ("KRWFC"). In its Application, Knox County requested recovery of the three-year average principal and interest payments that will become due in 2016, 2017, and 2018 on all bonds that were used to finance the cost of water system improvement projects. Staff agrees that the \$177,548 requested by Knox County represents, in all material respects, the average annual debt payments that will be made on the Water Division's long-term debts in each year that the water rates approved by the Commission in this proceeding will be in effect.

(2) Additional Working Capital. The DSC method, as historically applied by the Commission, includes an allowance for additional working capital that is equal to the minimum net revenues required by Knox County's lenders that are above its average annual debt payments. In this case, KRWFC requires that Knox County charge rates that produce net revenues that are at least 120 percent of its average annual bond payments. Following the Commission's historical practice, Staff calculated Knox County's allowance for additional working capital to be \$35,510, as shown below.<sup>13</sup> Staff included this amount in the calculation of Knox County's Overall Revenue Requirement for the Water Division. In its application, Knox County did not request recovery of the additional working capital.

<sup>13</sup> Inclusion of the additional working capital in Knox County's revenue requirement is not necessary for it to earn revenues that meet the minimum DSC ratio required by its lenders. As depreciation is a noncash item, it is excluded from the ratio calculation, which is actually a measure of cash flow. As shown below, Knox County's minimum DSC ratio is met with or without the inclusion of additional working capital.

	With Additional Working Capital	Without Additional Working Capital
Overall Revenue Requirement	\$ 1,398,474	\$ 1,362,964
Less: Operating and Maintenance Expense	(937,369)	(937,369)
Taxes Other Than Income	(21,642)	(21,642)
	<hr/>	<hr/>
Net Revenues	439,463	403,954
Divided by: Average Annual Debt Payments	177,548	177,548
	<hr/>	<hr/>
DSC Ratio	248%	228%

Average Annual Principal and Interest Times: DSC Coverage Ratio	\$ 177,548 <u>120%</u>
Total Net Revenues Required	213,058
Less: Average Annual Principal and Interest Payments	<u>(177,548)</u>
Additional Working Capital	<u>\$ 35,510</u>

Signatures

*Ariel Turnbull*

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*Jason Green*

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Prepared by: Jason Green  
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ATTACHMENT A  
STAFF REPORT, CASE NO. 2015-00142

RATES CALCULATED BY STAFF

Monthly Rates

5/8- x 3/4-Inch Meter

First	1,000 Gallons	\$ 18.68 Minimum Bill
Over	1,000 Gallons	7.38 Per 1,000 Gallons

1-Inch Meter

First	5,000 Gallons	\$ 48.20 Minimum Bill
Over	5,000 Gallons	7.38 Per 1,000 Gallons

2-Inch Meter

First	20,000 Gallons	\$ 158.90 Minimum Bill
Over	20,000 Gallons	7.38 Per 1,000 Gallons

3-Inch Meter

First	30,000 Gallons	\$ 232.70 Minimum Bill
Over	30,000 Gallons	7.38 Per 1,000 Gallons

4-Inch Meter

First	50,000 Gallons	\$ 380.30 Minimum Bill
Over	50,000 Gallons	7.38 Per 1,000 Gallons

ATTACHMENT B  
STAFF REPORT, CASE NO. 2015-00142

**KNOX COUNTY UTILITY COMMISSION  
ENGINEERING DIVISION'S  
ANALYSIS OF ASSET SERVICE LIVES**

Historically, the Commission has relied on the National Association of Regulatory Utility Commissioners Study of Depreciation Practices for Small Water Utilities ("NARUC Study"), dated August 15, 1979, to evaluate the reasonableness of a utility's depreciation practices. This study outlines expected service life ranges for various asset groups designed, installed, and maintained in accordance with good water works practices. Typically, an adjustment is made when the Commission finds that a utility is proposing to use a service life that falls outside of this range, while service lives falling within these ranges are generally accepted.

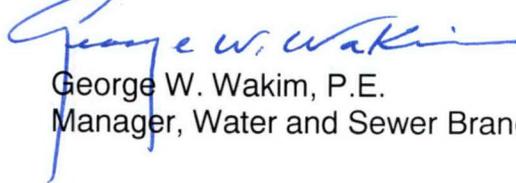
In the following table, Engineering Staff has identified the account classifications for which the utility's current service lives are not consistent with the service lives contained in the NARUC Study. The table shows the utility's current and Engineering Staff's recommended reasonable and appropriate service lives based on a review of information contained in the record of this case.

<b>Asset Classification</b>	<b>Current</b>	<b>Staff Recommended</b>	<b>NARUC Study</b>
Group:165-STRUCTURES & IMPR	10-25	37.5	35-40
Group:172-OTHER EQUIPMENT*	5-10	17.5	15-20
Group:175-PUMPING EQUIPMENT	7-10	20	20
Group:180-METERS & INSTALLS: METERS	10-20	40	35-45
Group:180-METERS & INSTALLS: INSTALLATIONS	20	45	40-50
Group:181-TRANS & DIST MAINS	10-40	62.5	50-75
Group:182-NEW SERVICES	20-40	40	30-50
Group:183-HYDRANTS	15-20	50	40-60
Group:184-TANKS	10-40	45	30-60
Group:185-TRANSPORTATION EQUIP	5-10	7	7

\*Tools, Shop & Garage Equipment and Laboratory Equipment.

Absent any specific and verifiable evidence supporting alternative service lives, Engineering Staff finds that service lives based on the NARUC Study, as shown in the above table, should be considered reasonable and appropriate.

Prepared July 2, 2015



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